

WHAT IS CLAIMED IS:

1. For use with a condenser unit of an air conditioner, a pre-cooling system, comprising:

a housing coupleable to a top of a condenser of an air conditioner, said condenser having a substantially-vertical exhaust;

a valve mounted in said housing and coupleable to a water source, said valve capable of operating independently of electrical power; and

a vane coupled to said valve and positionable in said substantially-vertical exhaust, said vane having an aerodynamically-shaped cross section useable to operate said valve.

2. The pre-cooling system as recited in Claim 1 wherein said aerodynamically-shaped cross section has a leading edge and a trailing edge, and wherein said leading edge is substantially thicker than said trailing edge.

3. The pre-cooling system as recited in Claim 2 wherein said aerodynamically-shaped cross section has an uppersurface and an undersurface and wherein said uppersurface is longer than said undersurface.

4. The pre-cooling system as recited in Claim 1 wherein said
2 vane has a concave undersurface.

5. The pre-cooling system as recited in Claim 1 further
2 comprising a water supply tube coupled to said valve and coupleable
3 to said water source.

6. The pre-cooling system as recited in Claim 1 further
2 comprising a spray nozzle in fluid communication with said valve.

7. The pre-cooling system as recited in Claim 1 further
2 comprising spray tubing interposed said valve and said spray
3 nozzle.

8. The pre-cooling system as recited in Claim 1 further
2 comprising a filter coupled to said valve and coupleable to said
3 water source.

9. The pre-cooling system as recited in Claim 8 wherein said
2 filter comprises hexametaphosphate.

10. A method of manufacturing a pre-cooling system for use
with a condenser unit of an air conditioner, said method
comprising:

providing a housing coupleable to a top of a condenser of an
air conditioner, said condenser having a substantially-vertical
exhaust;

mounting a valve in said housing, said valve coupleable to a
water source and capable of operating independently of electrical
power; and

coupling a vane to said valve, said vane having an
aerodynamically-shaped cross section and positionable in said
substantially-vertical exhaust, said aerodynamically-shaped cross
section useable to operate said valve.

11. The method as recited in Claim 10 wherein coupling a vane
includes coupling a vane wherein said aerodynamically-shaped cross
section has a leading edge and a trailing edge, and wherein said
leading edge is substantially thicker than said trailing edge.

12. The method as recited in Claim 11 wherein coupling a vane
includes coupling a vane wherein a straight line drawn between said
leading edge and said trailing edge defines a chord of said
aerodynamically-shaped cross section, and wherein said chord and a

5 direction of said substantially-vertical exhaust define an angle of
6 attack of said vane.

13. The method as recited in Claim 10 wherein coupling a vane
2 includes coupling a vane having a concave undersurface.

14. The method as recited in Claim 10 further comprising
2 coupling a water supply tube to said valve, said water supply tube
3 coupleable to said water source.

15. The method as recited in Claim 10 further comprising
2 coupling a spray nozzle in fluid communication with said valve.

16. The method as recited in Claim 10 further comprising
2 interposing spray tubing between said valve and said spray nozzle.

17. The method as recited in Claim 10 further comprising
2 coupling a filter to said valve, said filter coupleable to said
3 water source.

18. The method as recited in Claim 17 wherein interposing a
2 filter includes interposing a filter comprising hexametaphosphate.